

DOCUMENT RESUME

ED 407 980

JC 970 320

AUTHOR McIntyre, Chuck; Chan, Chueng-Rong
TITLE Educating Welfare Recipients in California Community Colleges. Part 1: Student Characteristics, Activities, and Performance.
INSTITUTION California Community Colleges, Sacramento. Office of the Chancellor.
PUB DATE May 97
NOTE 42p.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; College Role; *Community Colleges; Comparative Analysis; *Education Work Relationship; Educational Benefits; Enrollment; Outcomes of Education; Role of Education; *Student Characteristics; *Two Year College Students; Two Year Colleges; *Welfare Recipients
IDENTIFIERS *California Community Colleges

ABSTRACT

A study was undertaken to determine the extent to which the California Community Colleges (CCC) helped the state's welfare recipients obtain employment, increase earnings, and decrease welfare dependence. A literature review indicated that, while relatively few studies exist, community colleges do play a role in redistributing resources from wealthier taxpayers to less wealthy community college students and that the colleges do have a positive effect on graduates' earnings. Research on specific programs designed to move individuals from welfare to work, however, showed mixed results, increasing earnings but not substantially reducing welfare costs. In 1995-96, California's community colleges enrolled approximately 140,000 students receiving Aid to Families with Dependent Children (AFDC) benefits, representing 1 in every 6 AFDC recipients in the state. These students were younger and had more prior education than welfare recipients not enrolled, but were older, more often immigrants, and more likely to have a learning disability than other community college students. In addition, students receiving welfare are well-directed and perform well. Compared to other community college students, they are more likely to seek degrees and certificates, complete courses at nearly equal rates, earn only slightly lower grade point averages, and earn degrees and certificates slightly more often. Appendices contain data tables and 23 references. (HAA)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

Educating Welfare Recipients in California Community Colleges

Part 1 *Student Characteristics, Activities, and Performance*



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

C. McIntyre

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC).

May 1997

Chancellor's Office
California Community Colleges



Members of the Board

Robert A. Alleborn
Newport Beach

Yvonne Bodle
Ventura

Joe Dolphin
San Diego

Thomas F. Kranz
Los Angeles

David F. Lawrence
La Mirada

Vishwas D. More
Orinda

Alice S. Petrossian
Glendale

John W. Rice
Palo Alto

Roger M. Schrimp
Oakdale

Rosemary E. Thakar
San Francisco

Julia Li Wu
Los Angeles

Officers of the Board

Alice S. Petrossian, *President*
Robert A. Alleborn, *Vice President*

Vishwas More, *Past President*

Joe Dolphin, *CPEC Representative*
John Rice, *CPEC Alternative*

Office of the Chancellor

Thomas J. Nussbaum
Chancellor

Ralph Black
Acting General Counsel

Rita Cepeda
*Vice Chancellor for
Curriculum Services and Instructional Resources and
Acting Vice Chancellor for
Economic Development and Vocational Education*

Gus Guichard
*Vice Chancellor for
Governmental Relations*

Patrick Lenz
*Vice Chancellor for
Fiscal Policy*

José Peralez
*Vice Chancellor for
Human Resources*

Thelma Scott-Skillman
*Vice Chancellor for
Student Services and Special Programs*

Larry Toy
*Director of
System Advancement and Resource Development*

Judy Walters
*Vice Chancellor for
Policy Analysis and Development and
Acting Vice Chancellor for
Management Information Services*

Educating Welfare Recipients in California Community Colleges

Part 1

Student Characteristics, Activities, and Performance

May 1997

Prepared by

Dr. Chuck McIntyre
Director of Research

Dr. Chuen-Rong Chan
Educational Research Specialist



Research and Analysis Unit
Policy Analysis and Development Division

Chancellor's Office
California Community Colleges
1107 Ninth Street
Sacramento, California 95814-3607
E-Mail Address: cmcintyr@ccl.cccco.edu

Table of Contents

Summary	1
Introduction	3
Background	5
Specific Research Questions.....	8
Appendix A	12
References	
Appendix B.....	14
Findings (Tables and Figures)	

Educating Welfare Recipients in California Community Colleges Part 1: Student Characteristics, Activities and Performance

Summary

This report is the first of several by the Chancellor's Office, California Community Colleges, to determine the extent to which community college education helps welfare recipients obtain employment, increase earnings, and decrease welfare dependence. This Part 1 report presents findings about the characteristics, activities and performance of students who receive welfare benefits while enrolled, comparing them to other community college students. In addition, we review some of the current thinking and relevant research on these topics. We plan to issue subsequent reports about the impact of specific interventions on student performance, and the overall impact of community college education on welfare recipients' employment, earnings, and welfare dependence.

Recent federal welfare reform legislation (HR 3734, 1996) - to be implemented beginning 1997 - limits lifetime welfare eligibility and requires recipients to work after two years of benefits. In addition, states are required to show substantial increases in the numbers of welfare recipients who work if federal funding is to be maintained. As California and other states develop their implementation plans during 1997, there is pressure toward (1) assisting welfare recipients to find immediate employment, rather than (2) educating recipients in the skills and knowledge that will enable them to obtain lasting employment at a level of compensation that supports them and their dependents.

The notion that community college education can reduce welfare dependency is persuasive - particularly given the economy's shift toward more highly-skilled, and technologically-oriented jobs - but, there is little research to support this notion. Much theoretical and empirical work demonstrates the value that community colleges (and higher education generally) add to human capital. And, there are numerous studies about the use of community colleges as a tool to redistribute wealth through educational opportunity. Virtually none of this work, however, deals specifically with welfare recipients.

California Community Colleges (CCC) have a long-standing commitment to educating the disadvantaged. The colleges currently enroll more than 140,000 (*one of every six*) adult AFDC recipients in California. They enroll mostly at urban and rural colleges with high nearby unemployment. Research reported here indicates that: through a variety of special intervention programs, colleges help these individuals formulate valid educational goals; that they (welfare recipients) pursue these goals with energy; and that they achieve academic success at rates comparable to other similarly-situated students. Enrolling about 90,000 FTES on AFDC, CCCs have been spending an estimated \$350 million annually for their education.

- *Compared to other welfare recipients*, those on welfare who enroll at CCCs are:
 - Younger (28 vs. the 31 year-old general average for AFDC recipients).
 - Less often Hispanic; but more-often immigrant.
 - Have more prior education (more often are high school graduates).

Summary (continued)

- Compared to other CCC students, those on welfare are:
 - More often female (4 of every 5).
 - Slightly older (28 years-of-age).
 - Only slightly more often immigrants or refugees.
 - Only slightly more often identified with a learning or other disability (4% vs. 3%).
- CCC students on welfare are *quite active and frequently assisted*. Compared to other CCC students, students on welfare:
 - Are more often first-time, and less often have transferred from another college.
 - Enroll more often without high school or college degrees.
 - Continue and return (after stopping out 1+ terms) at the same rates!
 - More often seek occupational training than transfer education.
 - More often enroll in basic skills, child development, and occupational courses.
 - Attempt transfer English and mathematics at similar rates!
 - Carry larger academic class loads!
 - More often receive services, especially 2 or more matriculation services!
 - Far more often receive some form of financial aid!
 - Far more often are involved in special programs such as CARE and GAIN, both solely for welfare recipients; but, also in financial aid, EOPS, DSP&S, New Horizons, and others.....
- CCC students on welfare are *well-directed and perform quite well*. Compared to other CCC students, students on welfare:
 - Declare college educational goals at the same rates!
 - More often seek degrees and certificates!
 - Complete their courses at nearly equal rates!
 - Earn grade point averages that are only slightly lower!
(the differences, while statistically significant, are not substantial, ranging from just 0.04 to 0.2 of a grade point)
 - Earn degrees and certificates slightly more often!

Thus, the community colleges appear to be well positioned to undertake further training of welfare recipients. But, competing demands for college resources are increasing and there is increasing pressure for welfare recipients to work, rather than engage in education and training. These changes suggest that community colleges need additional resources and a restructuring of current efforts in order to meet the challenges of welfare reform.

Educating Welfare Recipients in California Community Colleges

Part 1: Student Characteristics, Activities and Performance

INTRODUCTION

The purpose of this research is to determine the extent to which community college education helps welfare recipients obtain employment, increase earnings, and decrease welfare dependence. This report, Part I of a series, covers the characteristics, activities and performance of community college students, highlighting those students who receive Aid to Families with Dependent Children (AFDC) welfare benefits. In addition, this report reviews some of the current thinking and relevant research on these topics. Other reports in this series will cover costs, outcomes and the value added to welfare recipients by community colleges.

Research on *human capital formation* has demonstrated the returns to investment in educating individuals. Related to this notion are the studies, both theoretical and empirical, by labor economists and others that deal with the *wages* of different groups within the United States' society: the poor (often on welfare) and rich; female and male; minority and white, young and old, less- and more-educated, and others. The point generally is to look at the disparities in wage earnings that exist among groups: the amount, trends, causes, and possible policy solutions that might remedy such disparities.

Closely related to projects on employment and earnings is the work of those who examine the *redistribution* of economic welfare (material well-being), separating that notion from work on resource allocation. This group often evaluates *public policies* that transfer wealth: intragenerationally, like *welfare* and progressive taxes, or intergenerationally, like social security and medicare.

Obviously, the contribution of education (specifically postsecondary or community college) to both the allocation and distribution of society's resources is key to our work. Does community college education, once factors like maturation and experience are controlled, add value to the stock of human capital? And, if so, what are the returns - in added employment and earnings - to a community college education, relative to the best alternative uses of the resources employed by community colleges? How substantial are the difficult-to-measure collective benefits (we all enjoy without purchasing) that define community college education as a public good? Moreover, are the colleges an effective tool for redistributing economic wealth among different societal groups or do they (colleges) perpetuate wealth inequalities. Specifically, are the colleges effective in efforts to educate the poor (as measured by students on welfare, among other factors), and what kinds of special interventions prove effective? Do the results redistribute opportunities, wealth, and status across broader categories of the population than would otherwise be the case?

The more specific of these questions are examined by educational researchers who employ the tools of economics, sociology, educational research, and psychology. There is a considerable body of literature about the value and redistributive effects of higher education; but, as the scope of study is narrowed to community colleges, that body shrinks. And, as the scope of study is further narrowed to the education of the poor in community colleges, particularly as they are represented by welfare recipients, the relevant literature is further reduced to just a handful of studies.

Our purpose in this project is to study the education of welfare recipients in community colleges and identify findings relevant to recently-enacted welfare reform which will have major consequences for the poor for years to come. While our empirical work is specific to California and the California Community Colleges, the research should also have national implications. In any case, the diversity of California's situation makes it a virtual microcosm of the nation's situation. California Community College students are diverse: there is no majority racial and ethnic group among those enrolled, and the state's population will have no majority by 2002. This diversity is mirrored in the variety of communities served by the 106 colleges, 46 centers, and hundreds of outreach locations throughout the state. Colleges themselves range from the very large (>20,000 students) to the very small (<500 students); are located in inner-city urban, suburban, and rural locations; and offer over 400 different programs in general lower division, vocational, technical, and pre-collegiate developmental education.

Recent federal welfare reform legislation (HR 3734, 1996) - to be implemented beginning 1997 - limits lifetime welfare eligibility and requires recipients to be working after two years of benefits. In addition, states are required to show substantial increases in the numbers of welfare recipients who work if federal funding is to be maintained. As states develop their implementation plans, there is pressure to move welfare policy toward (1) assisting recipients to find immediate employment, rather than (2) educating recipients in the skills and knowledge that will enable them to obtain lasting employment at a level of compensation that supports them and their dependents; see, for example, Anderson (1996). (The citations used in this report are listed in Appendix A.) There is a perception among many policymakers that education is too time consuming and has not been effective in reducing welfare dependency.

BACKGROUND

The notion that community college education can reduce welfare dependence and, indirectly, the wage disparity between poor and rich, is intuitively persuasive, particularly given the economy's shift toward more highly-skilled, and technologically-oriented jobs (McIntyre, 1997). But, there is little research to support this notion. Much theoretical and empirical work demonstrates the value that community colleges (and higher education generally) add to human capital. And, there are numerous studies about the use of community colleges as a tool to redistribute wealth through educational opportunity that reduces wage inequality. Virtually none of this work, however, deals specifically with welfare recipients and the poor generally.

Wage inequality in the United States grew during the 1980s and, presumably, is still growing. Freeman and Katz (1995) present a collection of studies that show U.S. wage inequality to be rising rapidly during the 1980s, generally because of changes in supply and demand for different skill categories. And, while similar labor market conditions occurred in other advanced countries, the existence of wage-setting institutions mitigated trends toward greater inequalities in those countries.

The institutional role of U.S. community colleges in reducing wage inequality isn't altogether clear. Most practitioners argue that the colleges' liberal admissions policies, frequent location, and diverse programs of both transfer and vocational education programs provide access and, therefore, opportunities to most adults so they can improve upon the employment and earnings they would otherwise have achieved; see, for example, Cohn and Brawer (1989). But, Brint and Karabel (1989) present a contrasting argument that community colleges' institutional impact perpetuates inter-group earnings inequality. Much of this debate rests on one's definition of equality or of the even more ambiguous notion of equity. Adding to the confusion, many investigators frame their research around whether individuals have a better chance of obtaining a baccalaureate degree if they start in four-year, rather than in two-year (community college) institutions. Most of these studies, like Daugherty (1992) and Whitaker and Pascarella (1994), find in favor of four-year institutions, though the controls for beginning skills, motivation and advantage invariably leave the reader uneasy. In any case, transfer education isn't the only mission of community colleges. Of equal importance are occupational training, economic development, English as a second language (ESL) and citizenship, and, to a lesser degree, continuing (sometimes called "adult") and community education (usually termed community or public service). Many of these community college programs enroll individuals who would not otherwise consider higher education.

Lin and Vogt (1996) examine 1972 U.S. high school graduates fourteen years later (1996) and conclude that a community college education improved occupational outcomes for individuals: job status for men

and blacks, earnings for women; and, therefore equalized individual opportunity. But, the study argues, the gap between more and less advantaged groups was not lessened by a community college education, and, therefore, the colleges did not lessen inter-group wage inequities.

California provides some evidence of the redistributive impact of community colleges. In this state, recent research indicates that a generally more-wealthy California taxpayer subsidizes the education of a generally less-wealthy Community College student. For instance, data reported by McIntyre (1997), from California Student Aid Commission studies, show for various groups:

	average family income
Community College Students	\$23,900
California State University Students	\$32,800
University of California Students	\$48,800
All Californians generally	\$37,600

Thus, taxpayers report about 60% higher incomes than do community college students, and, therefore, the public investment in community colleges is a progressive redistribution of wealth, from more-wealthy taxpayers to less-wealthy students, that leads to less inequality of incomes, provided that there is a positive income return to individuals undergoing a community college education.

Friedlander's research on California Community Colleges (1996) not only shows that individuals' earnings are a positive function of the amount of community college education they acquire, particularly the acquisition of an associate (two-year) degree, but also shows that there are observable earnings differentials from this education for the young, limited English speaking (LES), and the economically and academically disadvantaged. These findings are promising, but invite further work that would control for some of the input variables necessary to reach definitive conclusions about outcomes. Further relevant and positive observations are reported by Grubb (1996) who finds that the returns to more comprehensive education substantially exceed those of shorter-term job training that has a more narrow focus. (As noted elsewhere, these findings should prove important in debates about implementation of current welfare reform.)

More specific discussions deal with the skill levels necessary for welfare recipients to improve their employment and earnings sufficient to eliminate their dependence on public assistance. Over time, an increasingly technological economy requires higher levels of education. The U.S. Department of Education (1995) has found that between 1972 and 1992, high school dropouts and those who do not continue into postsecondary education have become more likely to go on welfare. The benefits to welfare recipients of a higher education are documented by Gittell, Gross and Holdaway (1993) and replicated and

confirmed by Thompson (1993) using case study material on welfare recipients undergoing higher education. Owen (1994) found significantly decreased welfare incidence from more education for black women during the late 1960s and early 1980s. Study of poor single-mother college students by Van Stone, Nelson and Niemann (1994) shows that while psychological beliefs about effort and family support were felt to be important to academic achievement, sociological factors were also; and that traditional university (and college) services were important, but not enough to ensure academic success.

Regarding specific programs to move welfare recipients into jobs, results appear mixed to positive. Research by the Manpower Development Research Council (MDRC) on work-incentive (WIN) programs conducted in 10 states during the 1980s (Gueron and Pauly, 1991) concluded that while nearly all programs produced earnings increases, they did not consistently reduce welfare costs, and that expectations from such programs "should be modest." Observers like Ellwood (1988), however, argue that MDRC studies ignore important factors about the labor market and about the very nature of the welfare system (which often discourages employment).

GAO studies (1987) found that efforts by states at alternative approaches to "workfare" (jobs) for AFDC recipients had a modest positive impact on participants' employment and earnings, but were often insufficient to boost participants off welfare. New Jersey (Freedman et. al., 1988) placed welfare recipients with wage subsidies and produced substantial gains for two quarters after which gains declined sharply. Examining the situation in southern states, Greenberg and Strawn (1991) recommend integrating education, job training and employment in the (southern) situation where education, wages, and public assistance are all chronically low. This multi-faceted strategy, including also counseling and child care, may have promise in other states as well.

Riccio et. al. (1994) produced an MDRC report on the California experience with its Greater Avenues for Independence (GAIN). Compared to a control group, GAIN participants' earnings were 25% higher, job searches and basic education substantially increased, and AFDC recipients reduced by 3% by year 3. Results varied by regions of the state, and Riverside County, emphasizing job placement, was the most successful. But, it isn't clear that this study adequately compared the benefits from shorter-term job placement to those of longer-term education. In this regard, however, Friedlander and Burtless (1995) compared nine local experiments and found that a model emphasizing longer term education and training, produced the longest lasting impact on earnings. Recent findings by Rangarajan (1997) are consistent with this. Analyzing a two-year demonstration project in Chicago, Portland, San Antonio and Riverside, Rangarajan observes that without increasing their job skills through education and training, workers will simply go from one low wage job to another.

SPECIFIC RESEARCH QUESTIONS

This study begins to examine several cohorts of welfare recipients who enroll in California Community Colleges. Holding their beginning skills, motivation and work constant, we analyze the impact that college instruction and special support interventions have on employment and earnings of these welfare recipients two and three years after they have completed their education. Their performance in college and the apparent value added, measured by their post-college performance, will be studied and compared to their student colleagues and to nonstudents. While specific to California, the number and diversity of subjects should enable the results to be generalized across the country.

Several major research questions, and a number of others, are addressed:

Who are the welfare recipients that now attend community colleges: their number, where they enroll, their characteristics, what they take, how they are supported? Has this profile changed over time and how will it change following welfare reform?

Preliminary work by McIntyre and Chan (1996) shows that enrollment of welfare recipients in California Community Colleges during the academic year 1994-95 was substantial: over 125,000 on AFDC or 8% of the total college enrollment (see statistical detail on this and the following observations in Appendix B). The penetration of this "welfare-recipient market" by colleges is remarkably high: community colleges enrolled one in about every six California adults who were on welfare. Only the "traditional" college-going group (18 to 24 year-olds) enroll in California Community Colleges at higher rates.

With the exception of the Los Angeles, Oakland, and Fresno metropolitan areas, the proportion of welfare students tends to be higher in the smaller community college districts (both urban and rural), and lower in the larger districts. As expected, higher concentrations of welfare students occur in colleges where the surrounding regional unemployment is highest. However, concentrations of welfare students are not necessarily higher in those colleges where overall access rates are reported to be higher.

The prior education and skills level of welfare recipients who enroll in a community college is higher than their counterparts (other welfare recipients), but below that of other community college students. And, compared to other community college students, welfare recipients are: more often female (hardly a surprise); slightly older (their average age was 28); more often immigrant, less often citizens; more often African American and Hispanic, less often Filipino and White; and - as expected - far more often receiving student financial aid. Nearly all students on welfare also receive some form of student financial aid, in

marked contrast to less than one-fourth of other students. (Our comparisons generally exclude students who already have obtained degrees; their profiles, motives and behavior are predictably different than those of any other students.)

On-going community college enrollment patterns of welfare recipients differ little from those of other students. Compared to other students, welfare recipients are more often first-time and seldom come from another postsecondary institution; but, they continue and return (to the community college) at about the same rate. And, perhaps surprisingly, welfare students declare educational goals and have them identified at similar rates as well. Possibly more surprising: welfare recipients seek degrees and, particularly, certificates at greater rates than other students. And, welfare recipients more often - than other students - pursue occupational, rather than transfer goals; carry heavier academic loads (an average of nine credit units per term), and far more often receive special out-of-class support like orientation, assessment, counseling, and the like. Their prior education and family characteristics explain why welfare recipients more often take pre-collegiate basic skills and child development courses than do other students; those characteristics do not, however, explain why welfare recipients take transfer mathematics and English courses at rates similar to those of other students.

There is little reason to believe that these comparisons have changed significantly over time, but we plan to compare several student cohorts (1994-95, 1995-96, 1997-98 and possibly 1998-99) so as to identify the change in student profile that will inevitably result from welfare reform, beginning with the 1997-98 academic year. Because of the new law, it is possible that a greater number of generally less-skilled welfare recipients may enroll in community college, take fewer units, and work more while enrolled. Therefore, educational delivery strategies for the poor need to be reviewed and changed in substantial ways.

How do welfare recipients perform while in college?

Preliminary study suggests that even with only partial (statistical) controls for beginning skill differences and the level of course work taken, welfare recipients in California Community Colleges perform at levels that are comparable to their college colleagues. They (welfare recipients) complete courses at nearly equal rates; earn grade point averages that are only slightly lower (the differences, while statistically significant because of our large samples, are not at all "substantial," ranging from 0.04 to 0.2 of a grade point at different course levels); and earn degrees and certificates (particularly the latter) slightly more often, than do their colleagues.

Does more education produce better results? What is the marginal return to additional unit(s) of instruction? Does the acquisition of a degree or certificate make a difference by way of increased employment and earnings, and decreased welfare dependence?

If the purpose of college education is to produce a more civil, knowledgeable and skilled society, among other objectives, then post-college employment, earnings, and dependence on public assistance - especially for welfare recipients - are key to answering our research. And, it is especially important, in view of the thrust of the new welfare policy (described by some as quick employment), to determine if longer-term education produces increasing returns as measured by increased job placement and sustained employment, higher earnings, and decreased taxpayer support for welfare assistance.

The popular wisdom is that earning a degree or certificate makes all the difference. The difficulty with this notion is that most community college students are pursuing skills and knowledge, typically for improved employment, but do not seek a degree or certificate in the process. Further work should clarify this situation and suggest possible practices to improve the certification of the community college experience.

Do some college programs and fields of study produce observably different results?

Since welfare reform is taking place against the backdrop of a significantly changing labor market, it is important to determine those college programs and fields of study and work that produce good results (defined here as increased employment and earnings and decreased welfare dependence). Our further work will measure these results and, if appropriate, suggest ways of using them in student counseling and in program and curriculum development.

What is the impact of special out-of-class support services?

About two of every five welfare recipients enrolled in California Community Colleges receive some type of special out-of-class support in the way of orientation, assessment, counseling, advising, tutoring and mentoring, child care, financial aid, and other assistance. We plan to estimate the impact or "return" these services have with regard to the college performance and post-college results (employment, earnings, welfare dependence), comparing, for instance, welfare recipients who are and who aren't so assisted, and welfare recipients receiving special assistance in contrast to non-recipients receiving similar assistance.

FURTHER WORK

Along with these major questions, our work includes a number of other questions dictated by the character of welfare reform implementation during 1997. This will enable us to evaluate the results of early welfare reform policies as their impact on community colleges evolves.

To address these questions, our further work examines several student cohorts enrolling in California Community Colleges, utilizing Chancellor's Office Management Information System (MIS) data on community college students. These subjects are then matched with Employment Development Department (EDD) data on employment and earnings; Department of Social Services (DSS) data on welfare recipients; and with University of California (UC) and California State University (CSU) data on transfer students from community colleges.

Data sets will then be partitioned further and subjected to rigorous tests of statistical differences, in some cases; and entered into regression and HLM (hierarchical linear modeling) models, and other analyses in order to get at the causes of variation in dependent (outcome) variables, in other cases. Results will be reported in other parts of this series on *Educating Welfare Recipients in California Community Colleges*.

APPENDIX A

EDUCATING WELFARE RECIPIENTS IN CALIFORNIA COMMUNITY COLLEGES PART 1: STUDENT CHARACTERISTICS, ACTIVITIES AND PERFORMANCE

REFERENCES

- Anderson, C. (1996). "Implications of Welfare Reform for Community Colleges," Testimony before California Senate Committee on Welfare Reform. Sacramento, October 1996.
- Brint, S. and J. Karabel. (1989). *The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America, 1900-1985*. New York: Oxford University Press.
- Cohen, A. and F. Brawer. (1989). *The American Community College, 2nd Ed.* San Francisco: Jossey Bass.
- Daugherty, K. (1994). *The Contradictory College: The Conflicting Origins, Impacts, and Futures of the Community College*. Albany: State University of New York Press.
- Department of Education. (1995). "Welfare and Education" *The Education Digest*, November 1995, 72.
- Freeman, R. and L. Katz. (1995). *Differences and Changes in Wage Structures*. Chicago: National Bureau of Economic Research and University of Chicago Press.
- Freedman, S., et. al. (1988). *The Demonstration of State Work/Welfare Incentives*. New York: Ford Foundation and New Jersey Department of Human Services.
- Friedlander, D. and G. Burtless. (1995). *Five Years After: The Long-Term Effects of Welfare-to-Work Programs*. New York: Russell Sage Foundation.
- Friedlander, J. (1996). *Using Wage Record Data to Track the Post-College Employment Rates and Wages of California Community College Students*. Santa Barbara: Santa Barbara City College.
- General Accounting Office. (1987). *Work to Welfare: Current AFDC Work Programs and Implications for Federal Policy*. Report for House of Representatives. Washington D.C.: GAO.
- Gittell, M., J. Gross, and J. Holdaway. (1993). *Building Human Capital: The Impact of Post-Secondary Education on AFDC Recipients in Five States*. New York: Ford Foundation and City University of New York.
- Greenberg, M. and J. Strawn. (1991). *Jobs in the South: The Impact of Low Welfare Benefits and Low Education Levels*. Washington D.C.: Center for Law and Social Policy.
- Grubb, W.N. (1996). *Learning to Work: The Case for Reintegrating Job Training and Education*. New York: Russel Sage Foundation.

Gueron, J. and E. Pauly. (1991). *From Welfare to Work*. New York: Russell Sage Foundation.

Lin, Y. and W.P. Vogt. (1996). "Occupational Outcomes for Students Earning Two-Year College Degrees: Income, Status, and Equity," *The Journal of Higher Education*, 67 (July/August), 446-460.

McIntyre, C. (Forthcoming Spring 1997). *Trends Important to Community Colleges*. Research White Paper. Washington D.C.: American Association of Community Colleges.

McIntyre, C. and C-R. Chan. (1996). *Enrollment of Welfare Recipients: Preliminary Analysis and Observations, Unpublished Report*. Sacramento: Chancellor's Office, California Community Colleges, December 3, 1996.

Owen, J. (1994). "Education and Welfare Incidence Among Black Women: Changes Over Time." *Economics of Education Review*, 13 (4), 337-353.

Rangarajan, A. (1997). *The Transition from Welfare to Work: Clients Experiences in the Post employment Services Demonstration*. (Paper presented at American Public Welfare Association Meeting, March 25, 1997.) Princeton: Mathematica Policy Research Inc.

Riccio, et.al. (1994). *GAIN: Benefits, Costs, and Three Year Impacts of a Welfare to Work Program*. New York: Manpower Demonstration Research Corporation.

Thompson, J. (1993). "Women, Welfare, and College: The Impact of Higher Education on Economic Well-Being." *Affilia*, 8, 4 (Winter 1993), 425-440.

Van Stone, N., J. Nelson, and J. Niemann. (1994). Poor Single-Mother College Students' Views on the Effect of Education." *The Journal of Higher Education*, 65, 5 (September, 1994), 571-580.

Whitaker, D. and E. Pascarella. (1994). "Two-Year College Attendance and Socioeconomic Attainment: Some Additional Evidence." *The Journal of Higher Education*, 65 (March/April), 194-210.

APPENDIX B

EDUCATING WELFARE RECIPIENTS IN CALIFORNIA COMMUNITY COLLEGES PART 1: STUDENT CHARACTERISTICS, ACTIVITIES AND PERFORMANCE

This material describes California Community College (CCC) students, highlighting those who receive Aid to Families with Dependent Children (AFDC) while they are enrolled:

1. How many AFDC students, and where they enroll
2. Their access
3. Who they are
4. What they do
5. How they perform:
 - Course completions
 - GPA
 - Degrees and Certificates
6. Impact of Interventions (forthcoming)
7. Resulting Salary and Employment (forthcoming)

FINDINGS

	Table
1. HOW MANY AFDC STUDENTS, AND WHERE THEY ENROLL:	
• At least 125,400 CCC students (8%) received AFDC in 1994-95; 140,000 in 1995-96.	1a
• Tend to be in small districts (except for L.A., Peralta, and State Center), both rural and urban!	1b
• Tend to be where regional unemployment is high, but not necessarily where access is "high"!	1b
2. THEIR ACCESS TO COMMUNITY COLLEGES:	
• Context: CCCs provide lowest access (6% of adults) in 25 years! - Asians and Filipinos enroll at highest rates - female > male rates across all ethnic groups.	Fig. 1 2a 2a
• AFDC enroll at rates (>15% of AFDC adults) second only to 18-24 year-olds!	2a
3. WHO THEY ARE:	
<i>Compared to other AFDC recipients, CCC students on AFDC are:</i> • younger (28 years-old vs. 31 years-old) • more often African American, White and Other, Hispanics appear underrepresented! • less often U.S. Citizens, and more often high school graduates	2b 2b 2b

3. WHO THEY ARE (Continued):

Compared to other CCC students, CCC AFDC recipients are:

- more often female (4 of every 5 AFDC students) 3
- older (ave=28); more often between 25 and 50 years-of-age 4
- slightly more often immigrants and refugees (1/5 vs. 1/7), less often citizens 5
- more often African American and Hispanic, less often Filipino and White 6
- more often receiving financial aid: BOGG, Pell (>1/3), and work study (3x) 7
- slightly more often (4% vs. 3%) identified with a learning or other disability 8

4. WHAT THEY DO:

Compared to other CCC students, CCC AFDC recipients are:

- more often first-time (1/3 vs. 1/5), but less often transferring (from another institution) 9
- continuing and returning (after stopping out for 1+ terms) at the same rates! 9
- enrolling more often without high school (1/4 vs. 1/8), and less often with degrees (4%) 10
- declaring educational goals and having them identified at equal rates! 11
- more often seeking degrees and certificates! 11
- more often seeking occupational training, less often transfer 11
- more often enrolling in basic skills, child development, and occupational courses 12
- attempting transfer English and mathematics at nearly the same rates! 12
- carrying slightly larger academic loads on average (9 vs. 8 term credit units)! 13,15
- more often receiving services, especially 2+ matriculation (3/5 vs. 2/5) 14
- more often involved in special programs (41% vs. 6%); AFDC =35% of EOPS and CARE 14

5. HOW THEY PERFORM:

Partially controlling for entering abilities, compared to other CCC students, CCC AFDC students:*

- complete courses at nearly equal rates 15
- earn grade point averages that are only slightly lower (the differences, while statistically significant, are not "substantial," ranging from 0.04 to 0.2 of a grade point) 16
- declare academic goals at the same rate and more often seek degrees and certificates 17,18
- earn degrees and certificates slightly more often 17,18
- seek on certificates more often than on degrees 17,18

*This partial control for entering ability first separates those students who already have degrees and certificates from those who do not. Then, as another proxy for entering ability, students who take a pre-collegiate and/or basic skills course during 1994-95 are separated from those who do not.

Table 1a. Numbers of AFDC and Other Students

California Community Colleges, 1994-95			
Student Type	Estimate*	%	
AFDC with degree	4,174	0.19%	*Unduplicated headcount enrollment for all terms during 1994-95.
AFDC without degree	121,226	5.54%	
AFDC Short Term**	51,000	2.33%	
AFDC Subtotal	176,400	8.06%	
Non AFDC with degree	252,340	11.54%	
Non AFDC, no degree	1,688,734	77.20%	
NonAFDC Short Term***	70,000	3.20%	
NonAFDC Subtotal	2,011,074	91.94%	
Total	2,187,474	100.00%	

**Individuals identified as AFDC and enrolled during 1994-95, but for whom no other information is available. They may be enrolled for <1/2 term credit units or <8 term contact hours, or in contract education. Work continues (12/3/96) to further identify these individuals.

***Estimate of individuals enrolled for <1/2 credit units or <8 term contact hours.

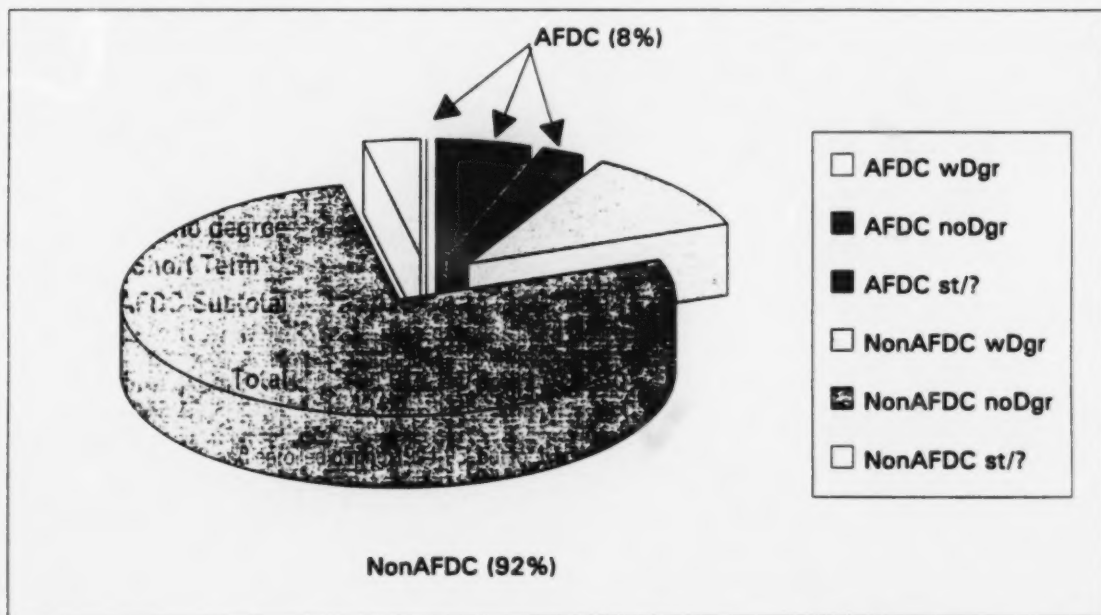


Table 1b: Community College District AFDC Enrollment, 1994-95

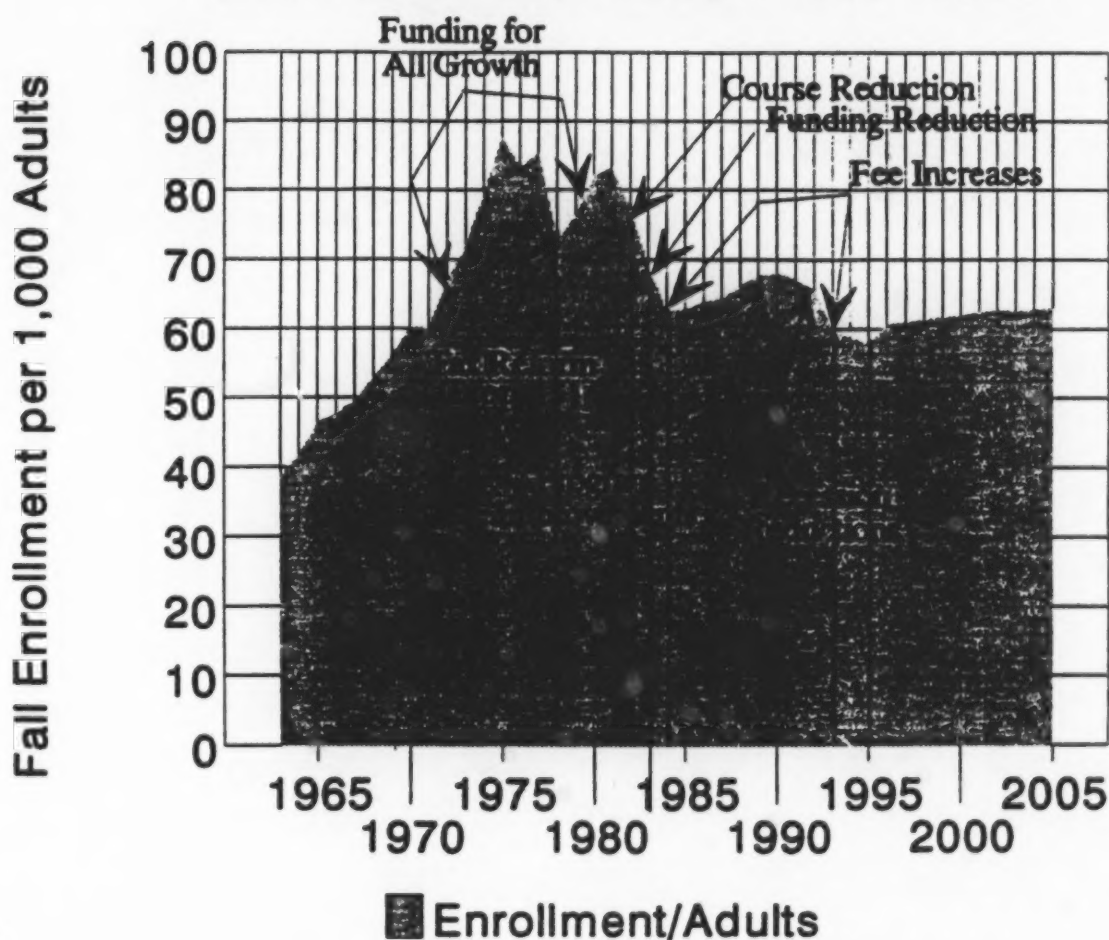
	AFDC Enroll	Fall Enroll	AFDC/ Enroll	District Adults	Enroll/ Adults	County Unemp.
COMPTON	1,692	5,177	33%	164,464	3.15%	7.50%
MENDOCINO	908	3,325	27%	65,342	5.09%	7.00%
MERCED	2,497	9,843	25%	127,464	7.72%	11.90%
VICTOR VALLEY	2,193	8,724	25%	173,781	5.02%	7.10%
YUBA	2,347	9,705	24%	163,383	5.94%	11.90%
IMPERIAL	1,538	6,607	23%	87,763	7.53%	34.70%
WEST KERN	233	1,005	23%	13,688	7.34%	11.50%
LASSEN	531	2,616	20%	19,204	13.62%	7.80%
BUTTE	1,878	10,266	18%	156,668	6.55%	7.50%
SAN BERNARDINO	2,995	16,555	18%	418,291	3.96%	7.10%
SISKIYOU	496	2,748	18%	33,870	8.11%	10.90%
PERALTA	4,458	25,068	18%	428,505	5.85%	5.10%
SHASTA	1,783	10,123	18%	169,421	5.98%	9.00%
WEST HILLS	464	2,636	18%	61,337	4.30%	10.70%
ANTELOPE VALLEY	1,584	9,602	16%	227,527	4.22%	7.50%
SEQUOIAS	1,413	8,808	16%	199,963	4.40%	14.80%
FEATHER	145	912	16%	15,783	5.78%	6.90%
STATE CENTER	3,799	24,160	16%	531,025	4.55%	10.70%
Quartile 4 (average):	1,720	8,771	19.61%	169,860	5.16%	8.40%
SAN JOAQUIN D	2,649	17,431	15%	377,024	4.62%	8.70%
BARSTOW	335	2,271	15%	33,362	6.81%	7.10%
YOSEMITE	2,710	18,376	15%	350,391	5.24%	9.50%
REDWOODS	989	6,968	14%	121,883	5.72%	7.30%
LOS ANGELES	13,702	105,514	13%	3,521,968	3.00%	7.50%
KERN	2,873	22,195	13%	446,602	4.97%	11.50%
MT SAN JACINTO	721	5,776	12%	310,303	1.86%	9.00%
LONG BEACH	2,712	22,214	12%	342,769	6.48%	7.50%
SAN JOSE	2,420	20,067	12%	505,502	3.97%	3.70%
LOS RIOS	6,099	51,441	12%	913,854	5.63%	5.70%
SAN DIEGO	9,233	78,735	12%	676,905	11.63%	5.30%
GAVILAN	483	4,134	12%	92,886	4.45%	3.70%
CHAPPEY	1,547	13,511	11%	407,072	3.32%	7.10%
HARTNELL	770	6,926	11%	139,371	4.97%	6.90%
DESERT	1,009	9,115	11%	234,019	3.89%	9.00%
PALO VERDE	192	1,737	11%	12,882	13.48%	9.00%
ALLAN HANCOCK	1,400	13,127	11%	138,466	9.48%	5.50%
Quartile 3 (average):	2,932	22,684	12.93%	488,618	4.64%	7.30%

Table 1b: Community College District AFDC Enrollment, 1994-95

	AFDC Enroll	Fall Enroll	AFDC/ Enroll	District Adults	Enroll/ Adults	County Unemp.
SOLANO	1,014	10,314	10%	257,743	4.00%	7.30%
GROSSMONT	1,828	19,835	9%	316,282	6.27%	5.30%
LAKE TAHOE	232	2,609	9%	25,353	10.29%	5.60%
SOUTHWESTERN	1,309	15,591	8%	241,867	6.45%	5.30%
CONTRA COSTA	3,087	37,475	8%	646,414	5.80%	4.90%
CERRITOS	1,670	20,697	8%	300,963	6.88%	7.50%
CITRUS	898	11,451	8%	152,051	7.53%	7.50%
MIRA COSTA	908	11,684	8%	249,266	4.69%	5.30%
SAN FRANCISCO	4,087	52,697	8%	596,552	8.83%	4.80%
RIO HONDO	1,153	15,075	8%	263,347	5.72%	7.50%
PASADENA	1,919	26,213	7%	291,838	8.98%	7.50%
ELCAMINO	1,619	22,150	7%	426,644	5.19%	7.50%
RANCHO SANTIAGO	3,320	45,574	7%	353,347	12.90%	4.10%
CABRILLO	878	12,543	7%	173,269	7.24%	5.90%
NAPA	464	7,283	6%	92,040	7.91%	5.10%
SONOMA	1,635	27,551	6%	318,838	8.64%	4.00%
MT SAN ANTONIO	1,712	28,906	6%	515,819	5.60%	7.50%
Quartile 2 (average):	1,688	21,235	7.95%	307,827	6.90%	5.60%
RIVERSIDE	1,184	20,368	6%	432,549	4.71%	9.00%
SIERRA	799	13,896	6%	236,306	5.88%	5.40%
VENTURA	1,480	26,628	6%	514,560	5.17%	8.20%
CHABOT	985	18,187	5%	383,955	4.74%	5.10%
SAN LUIS OBISPO	420	7,880	5%	156,098	5.05%	5.30%
PALOMAR	1,256	23,621	5%	412,767	5.72%	5.30%
COAST	2,284	47,746	5%	488,927	9.77%	4.10%
WEST VALLEY	1,132	23,923	5%	287,324	8.33%	3.70%
MONTEREY	481	11,280	4%	97,661	11.55%	6.90%
MARIN	520	12,279	4%	190,491	6.45%	3.30%
FOOTHILL	1,450	38,018	4%	313,784	12.12%	3.70%
FREMONT	309	8,570	4%	170,046	5.04%	5.10%
SAN MATEO	851	25,578	3%	537,133	4.76%	3.40%
SANTA BARBARA	691	21,819	3%	142,216	15.34%	5.50%
SANTA CLARITA	191	6,157	3%	138,406	4.45%	7.50%
NORTH ORANGE	1,602	53,743	3%	586,693	9.16%	4.10%
SADDLEBACK	787	32,227	2%	517,178	6.23%	4.10%
GLENDALE	17	18,215	0%	157,411	11.57%	7.50%
SANTA MONICA	NA	22,414	NA	93,575	23.95%	7.50%
Quartile 1 (average):	913	22,785	4.01%	320,195	7.12%	5.30%
Statewide (average):	1,440	17,568	8.19%	264,693	6.64%	6.70%

Figure 1

CALIFORNIA COMMUNITY COLLEGES
ACCESS AND POLICY
Actual 1963-95; Forecast 1996-2005



SOURCE: Chancellor's Office, California Community Colleges, September 1996.

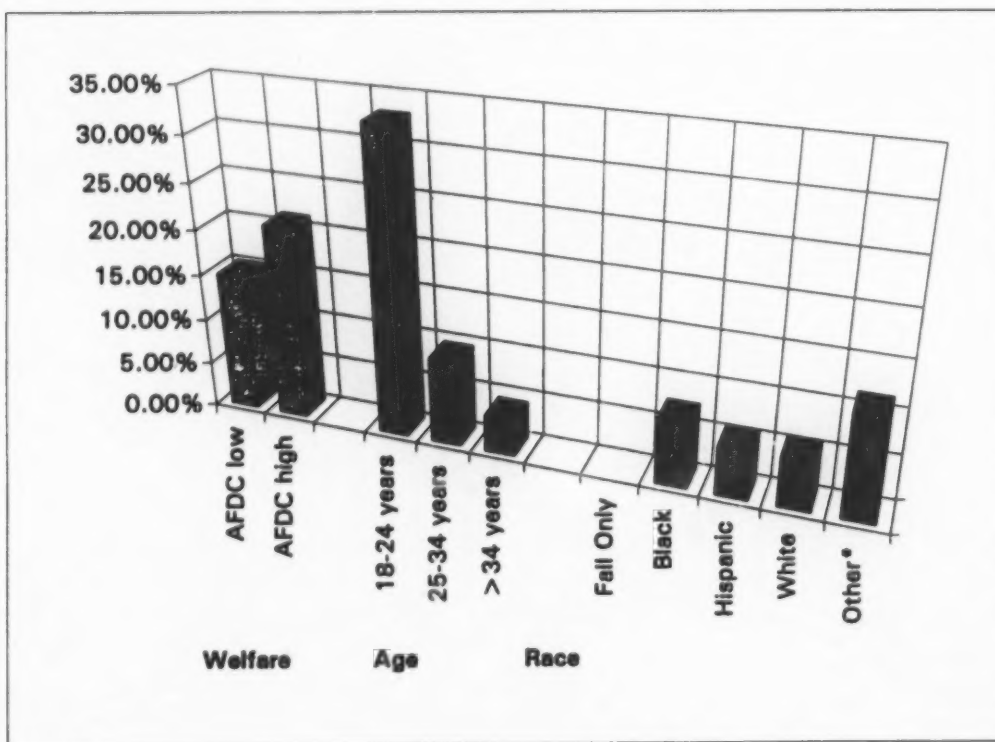
NOTES: Major policies are depicted as influencing enrollment change. Lesser policies, economic conditions (unemployment), and demographic change also impacted enrollment, but typically to a lesser degree.

BEST COPY AVAILABLE

Table 2a. Access Rates

California Community Colleges, 1994-95

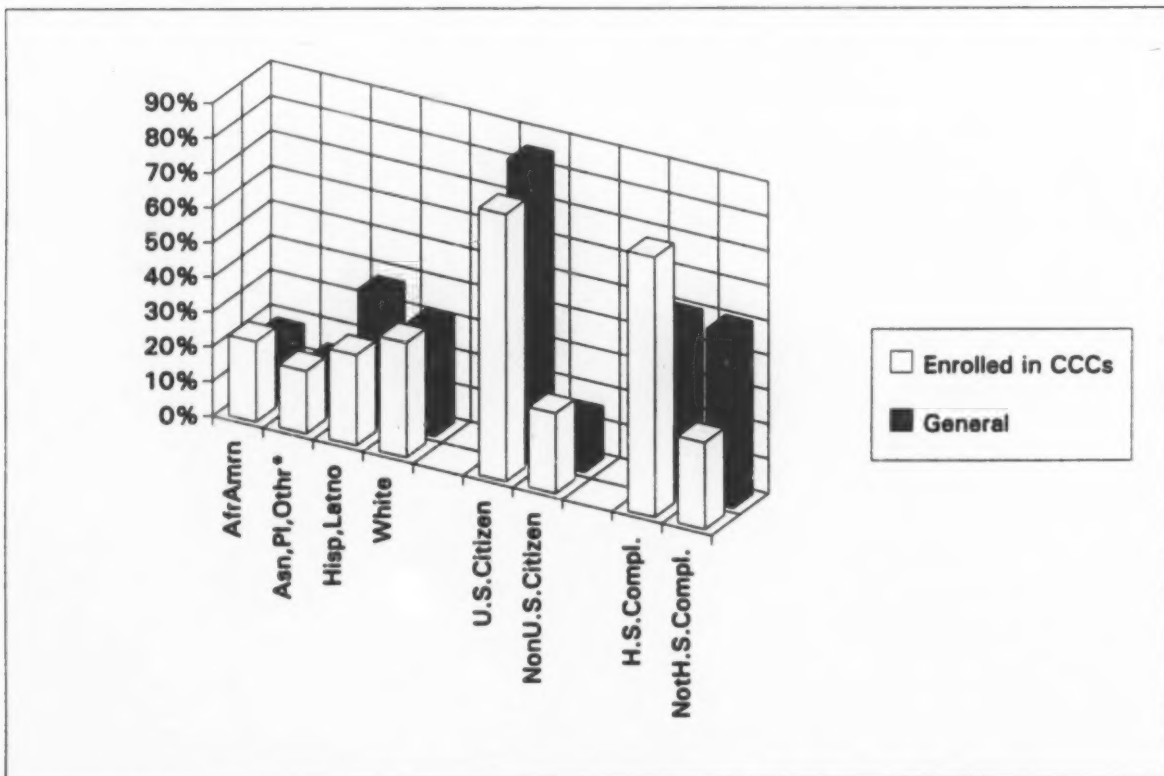
	E/A	Enrolled (E)	Adults (A)
AFDC low	15.02%	125,400	834,941
AFDC high	21.13%	176,400	834,941
18-24 years	32.99%	940,069	2,849,859
25-34 years	9.45%	516,923	5,467,462
>34 years	4.08%	609,128	14,932,964
Fall Only			
Black	7.27%		E/A Male 5.80% E/A Female 8.75%
Hispanic	5.41%		4.58% 6.36%
White	5.48%		4.54% 6.46%
Other*	11.38%		11.08% 11.62%



*Other includes Asian, Pacific Islanders, Native American, Filipinos, and Others.

Table 2b. Welfare Recipients' Characteristics

	AFDC Recipients Enrolled in CCCs	AFDC Recipients in General
	%	%
African American	23%	18%
Asian, Pacis, Other	18%	14%
Hispanic, Latino	26%	37%
White, Caucasian	33%	31%
U.S. Citizen	77%	85%
Non U.S. Citizen	23%	15%
H.S. Compl.	75%	50%
Not H.S. Compl.	25%	50%
Average Age	28 years	31 years



*Other includes Asian, Pacific Islanders, Native American, Filipinos, and Others.

Table 3. Gender

California Community Colleges, 1994-95

	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
Female	96,509	79%	70,028	53%	9,375	55%
Male	25,945	21%	61,066	47%	7,728	45%
Total	122,454	100%	131,094	100%	17,103	100%

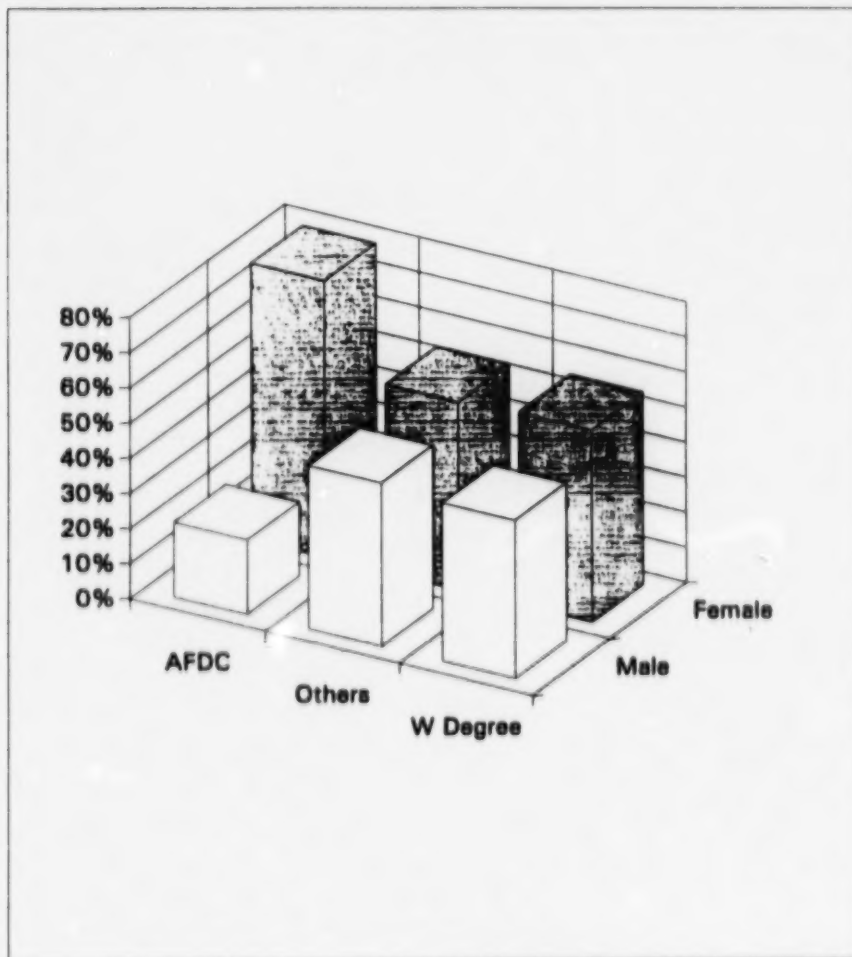


Table 4. Age

California Community Colleges, 1994-95

	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
<24	50,403	41%	68,073	52%	1,819	11%
25-34	43,007	35%	31,228	24%	5,586	32%
35-49	28,417	23%	21,488	16%	6,761	39%
50+	2248	2%	10972	8%	3057	18%
Total	124,075	100%	131,761	100%	17,223	100%

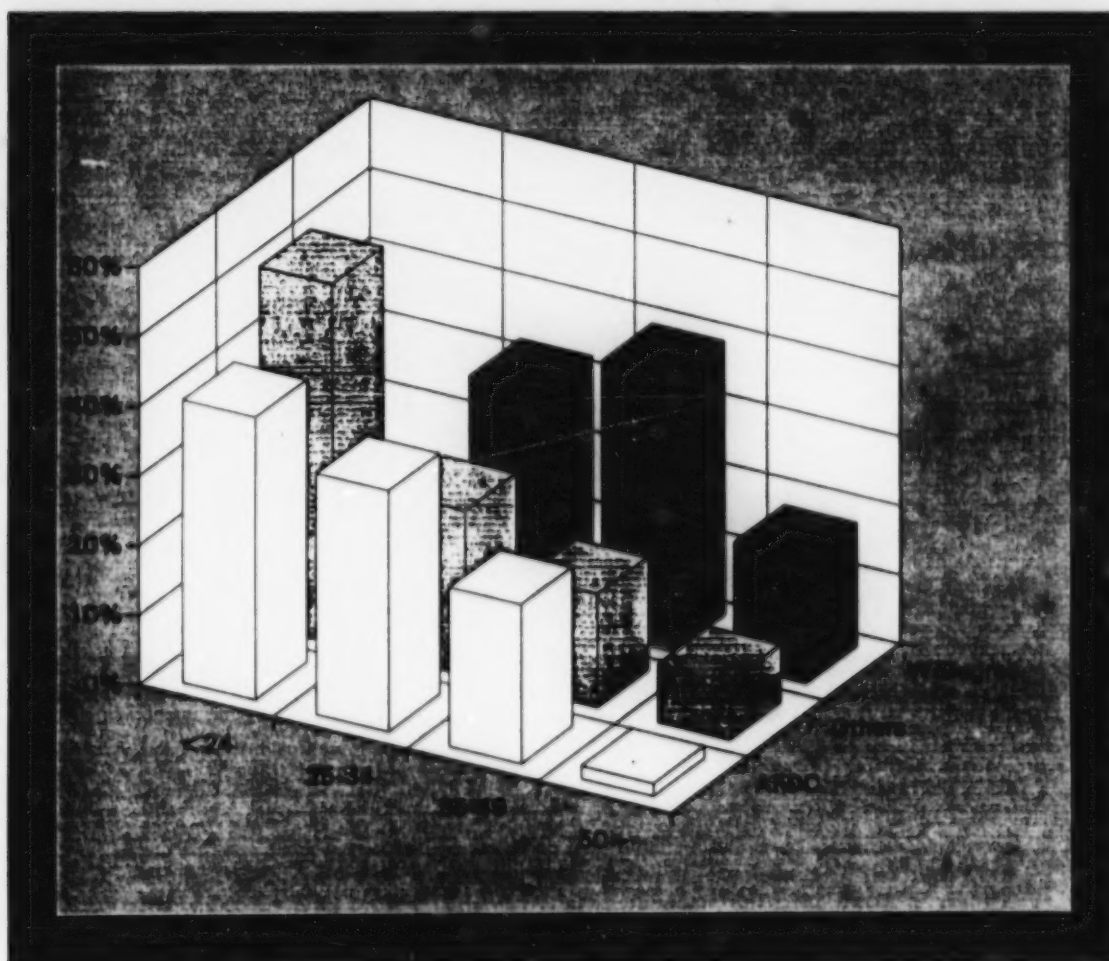


Table 5. Citizenship

California Community Colleges 1994-95

	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
Citizen	93,847	77%	101,410	80%	15,641	91%
Permanent Resident	21,671	18%	18,346	14%	1,099	6%
Temporary Resident	410	0%	674	1%	33	0%
Refugee/Asylee	5,084	4%	1,897	1%	48	0%
Student Visa	141	0%	1,832	1%	154	1%
Other	1,067	1%	3,098	2%	190	1%
Total	122,220	100%	127,257	100%	17,165	100%

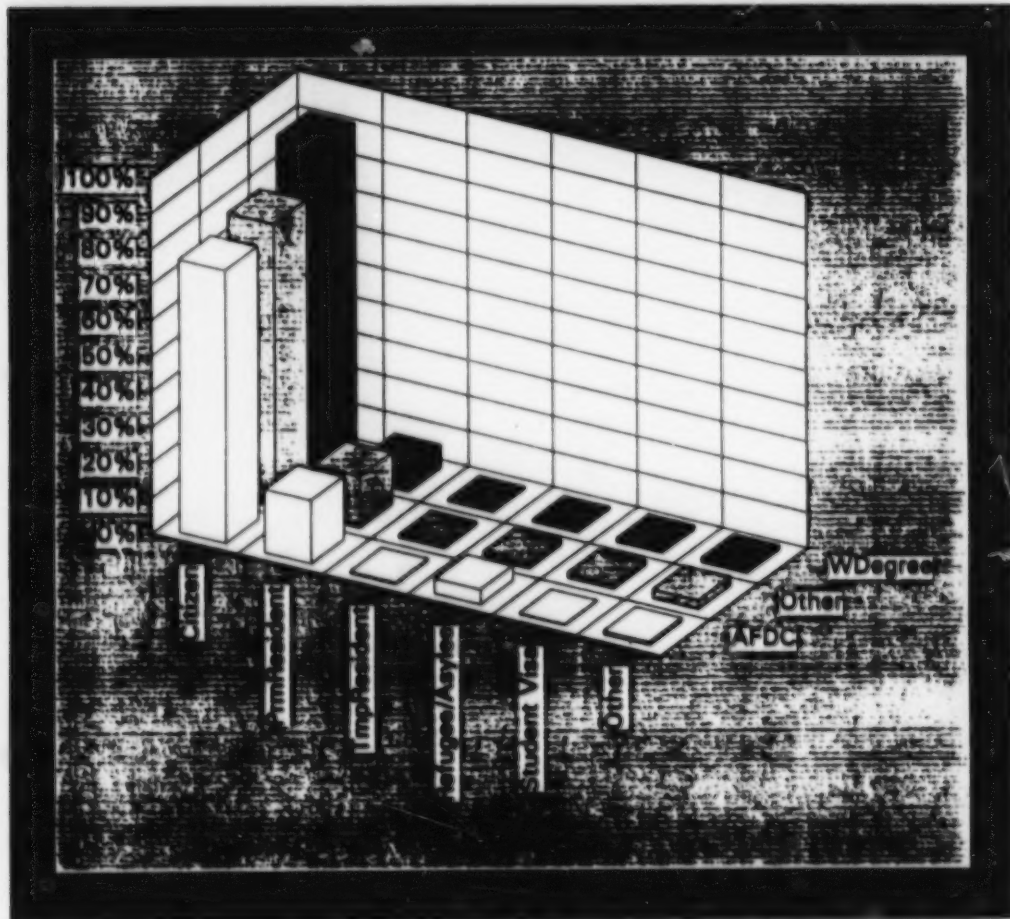


Table 6. Ethnicity

California Community Colleges 1994-95

	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
Asian	15,643	13%	16,703	13%	1813	11%
African American	27,260	23%	9,160	7%	955	6%
Filipino	1,489	1%	4,563	4%	521	3%
Hispanic	30,890	26%	30,439	24%	1,693	10%
Native Amrn/Alaskan	2,076	2%	1,520	1%	132	1%
Pacific Islander	702	1%	712	1%	62	0%
White	39,470	33%	60,177	48%	11,075	67%
Other	1,872	2%	2,009	2%	226	1%
Total	119,402	100%	125,283	100%	16,477	100%

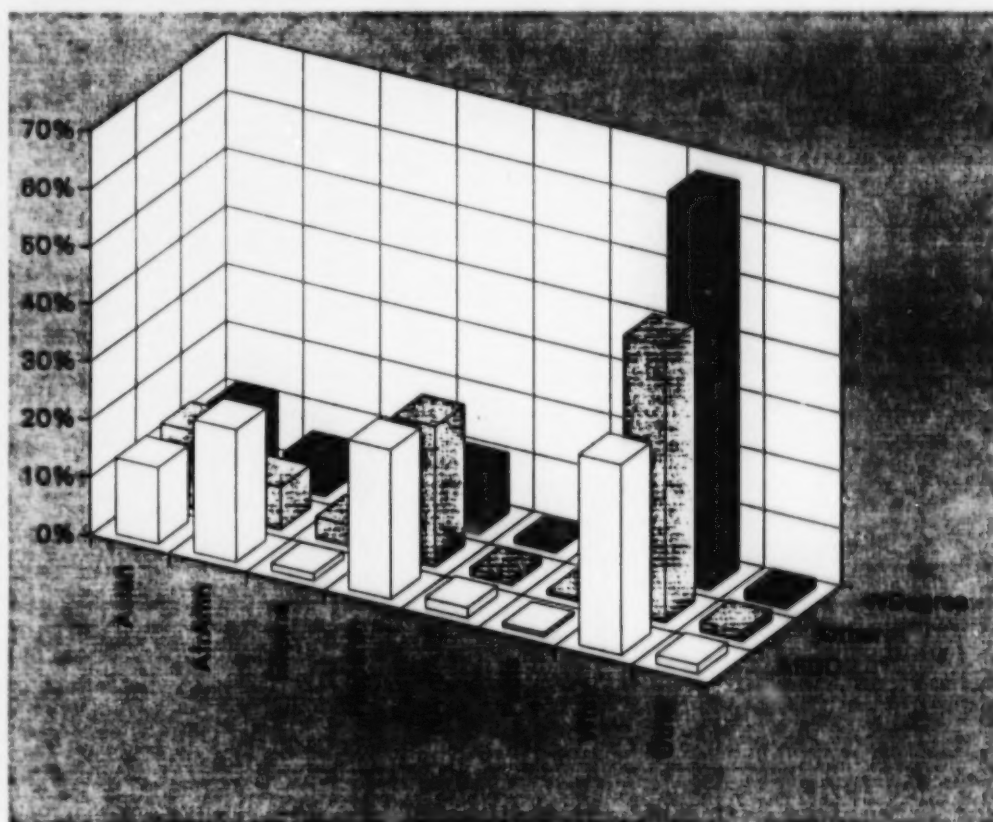


Table 7. Student Financial Aid

California Community Colleges 1994-95*

	AFDC		W/O Degree		With Degree		Total
	Number	%	Number	%	Number	%	
BOGGrant	111,838	90%	330,142	20%	17,847	7%	459,828
No BOG	12,518	10%	1,358,592	80%	234,493	93%	1,605,602
Total	124,356	100%	1,688,734	100%	252,340	100%	2,065,430
Pell Only	20,245	16%	59,094	3%	1,592	1%	80,931
Pell +	24,749	20%	51,132	3%	1,352	1%	77,233
Other	1,820	1%	16,760	1%	2,398	1%	20,978
None	77,542	62%	1,561,747	92%	246,999	98%	1,886,288
Total	124,356	100%	1,688,734	100%	252,340	100%	2,065,430
Work Study	3,428	3%	10,152	1%	0	0%	13,580

*Estimates from MIS sample and Chancellor's Office Financial Aid Records. Excludes loans. Unduplicated headcount in all terms

PERCENT RECEIVING AID

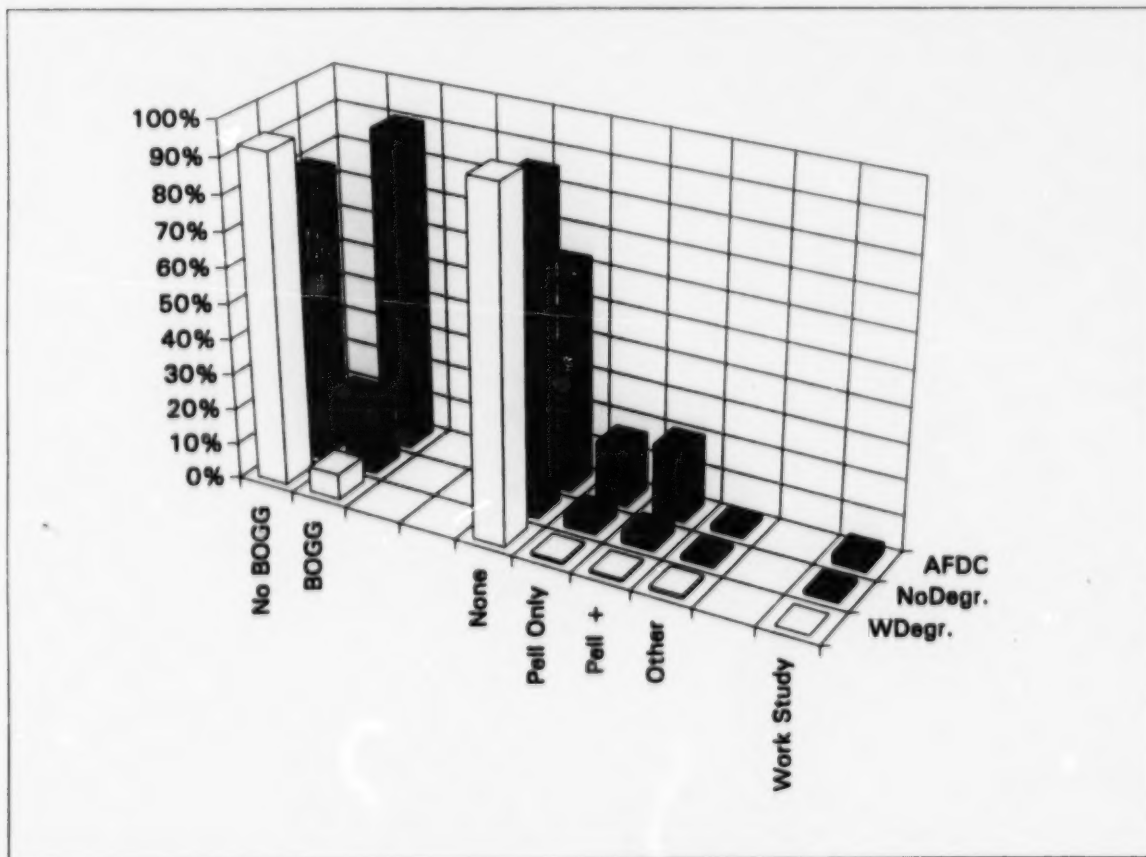


Table 8. Disability

**California Community Colleges 1994-95
Students Receiving Services by Type of Disability**

	AFDC		Sample w/o Degree		Sample with Degree	
	Number	%	Number	%	Number	%
None	119,136	96%	146,628	98%	16,874	98%
Brain Injury	85	2%	260	7%	49	13%
Hearing Impairment	168	3%	154	4%	28	7%
Mobility Impairment	772	15%	761	21%	116	30%
Visually Impaired	69	1%	134	4%	14	4%
Dev Dlyd Learning	295	6%	184	5%	1	0%
Learning	2,803	54%	1,364	38%	80	21%
Speech/Language	54	1%	53	1%	3	1%
Psychological	281	5%	182	5%	19	5%
Other	693	13%	527	15%	77	20%
Totals	5,220	100%	3,619	100%	387	100%

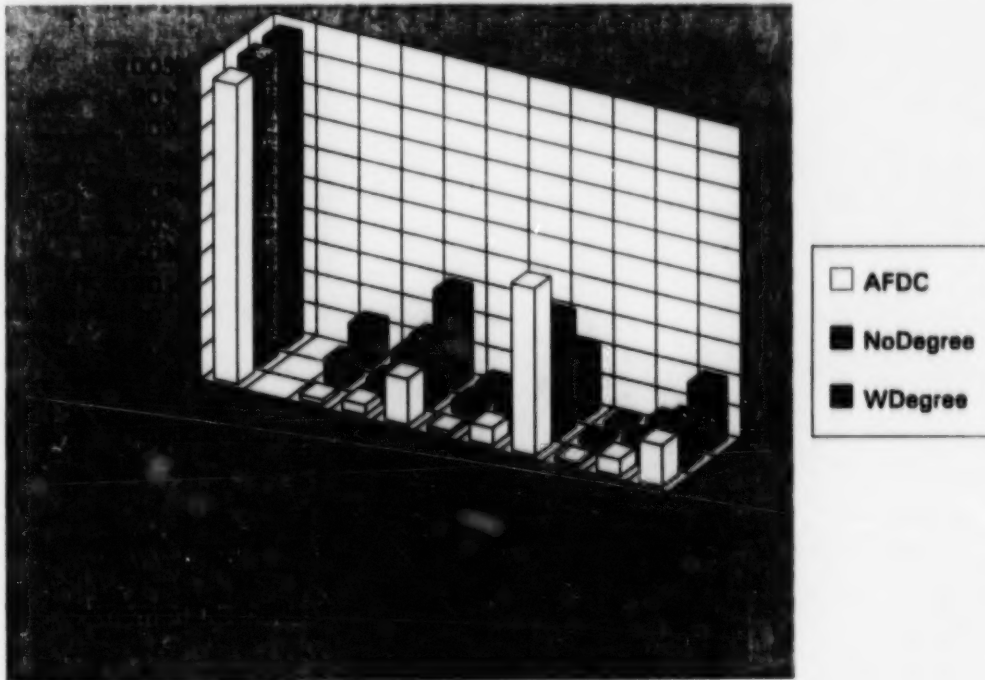


Table 9. Enrollment Status

California Community Colleges 1994-95

	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
First Time	36,463	32%	29,472	24%	0	0%
Transfer	12,740	11%	19,587	16%	7,356	43%
Returning	18,092	16%	19,567	16%	3,875	23%
Continuing	48,398	42%	51,980	43%	5,845	34%
Total	115,693	100%	120,606	100%	17,076	100%

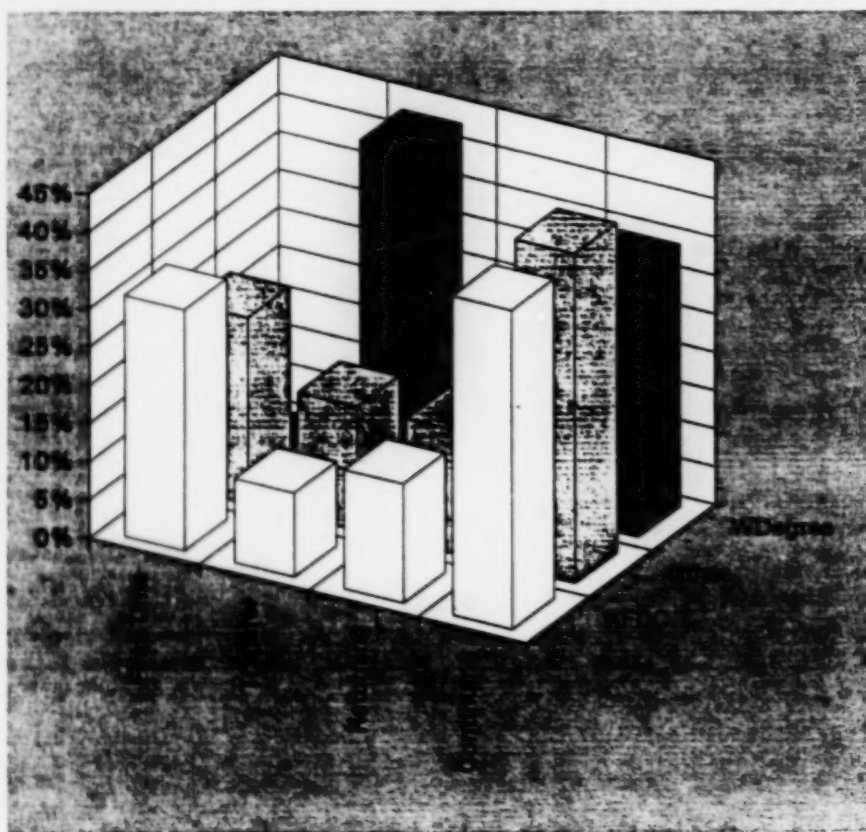


Table 10. Academic Level

California Community Colleges 1994-95

	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
Fresh/NoHS/Spc	26,929	24%	15,606	13%	0	0%
Fresh/HS	63,660	57%	78,184	66%	0	0%
Sophomore	11,347	10%	15,545	13%	0	0%
AA/AS	3,025	3%	0	0%	8,225	48%
BA/BS	849	1%	0	0%	9,036	52%
Other	6,639	6%	8,755	7%	0	0%
Total	112,449	100%	118,090	100%	17,261	100%
Unknown	11,907		14,896		0	

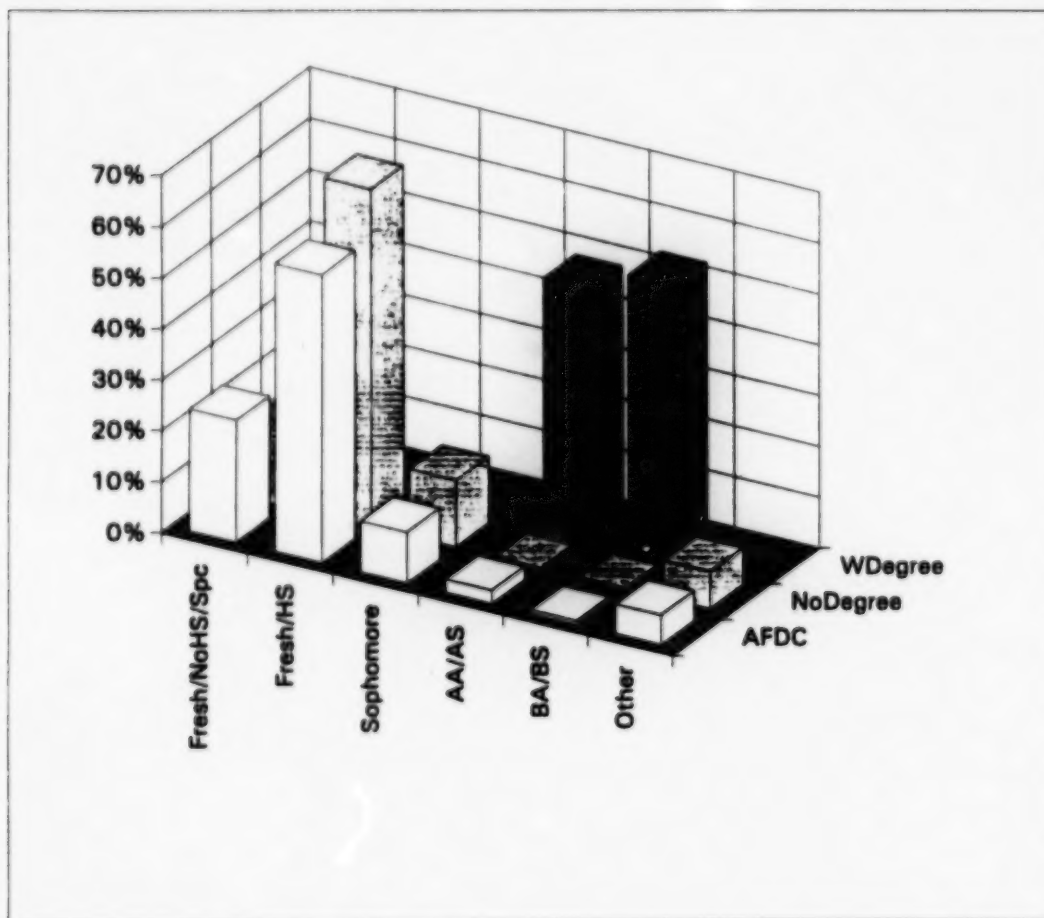


Table 11. Educational Goals

California Community Colleges 1994-95

	AFDC		Sample w/o Degrees		Sample With Degree	
	Number	%	Number	%	Number	%
AA,AS,Cert.	51,847	46%	47,592	41%	4,170	26%
NonDegree,Cert.	39,986	36%	47,665	41%	10,048	62%
Undecided	19,809	18%	21,959	19%	1,953	12%
Total	111,642	100%	117,216	100%	16,171	100%
Transfer wAA	24,302	22%	31,263	27%	2,208	14%
Transfer woAA	7,499	7%	15,553	13%	1,031	6%
New Career	14,093	13%	11,129	9%	2,796	17%
Occupational	30,789	28%	22,285	19%	4,709	29%
Improve Skills	9,828	9%	11,883	10%	3,443	21%
HS Diploma	5,322	5%	3,144	3%	31	0%
Undecided	19,809	18%	21,959	19%	1,953	12%
Total	111,642	100%	117,216	100%	16,171	100%
Unknown	12,714		15,770		1,090	

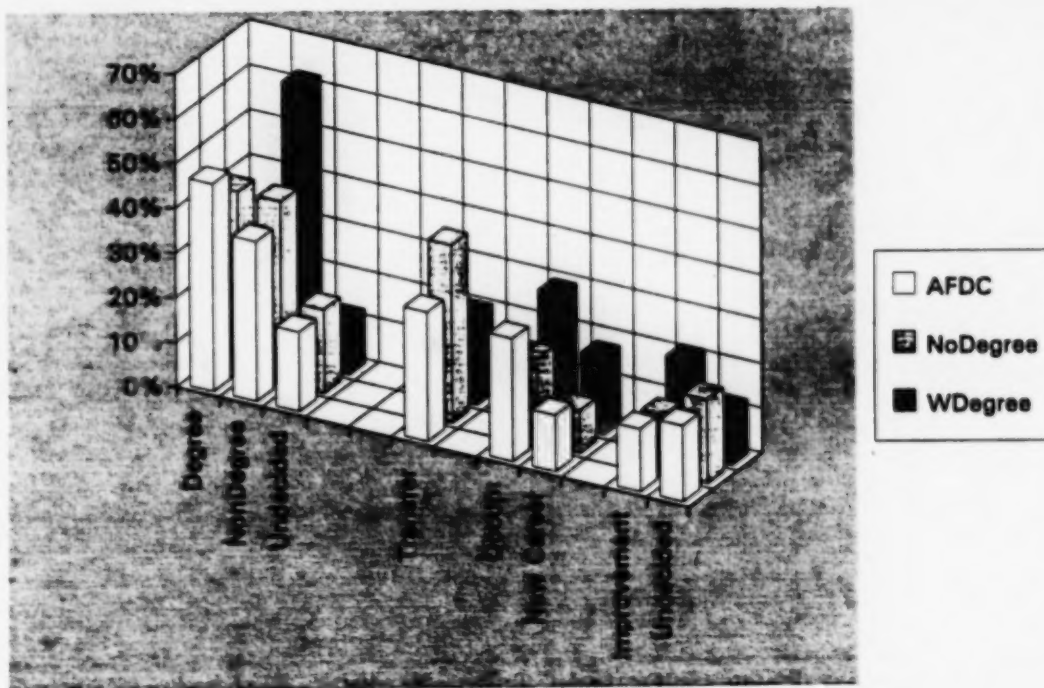


Table 12. Programs and Courses

California Community Colleges 1994-95

Program:	AFDC		Sample w/o Degree		Sample With Degree	
	Number	%	Number	%	Number	%
Occupational	49,356	40%	42,241	32%	7,564	44%
Possibly Occupational	19,896	16%	19,737	15%	1,942	11%
NonOccupational	55,101	44%	70,993	53%	7,755	45%
Total	124,353	100%	132,971	100%	17,261	100%
Taking:						
Child Development	13136	11%	5768	4%	646	4%
Basic Skills/PreColl.	36,474	29%	16,744	13%	577	3%
Other	87,882	71%	116,242	87%	16,684	97%
Total	124,356	100%	132,986	100%	17,261	100%
Transfer Math and Engl.						
Other	26,342	21%	33,917	26%	1,908	11%
Other	98,005	79%	99,069	74%	15,353	89%
Total	124,347	100%	132,986	100%	17,261	100%

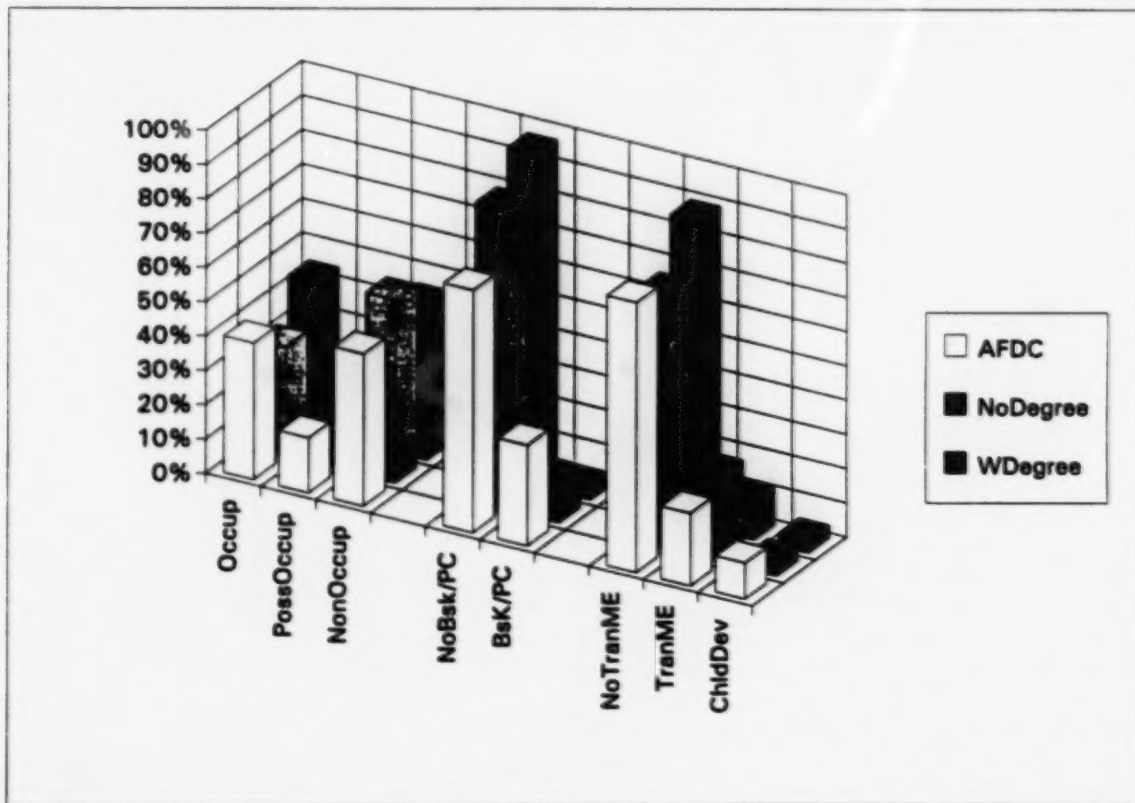


Table 13. Academic Load

California Community Colleges 1994-95

	AFDC Number	%	Sample w/o Degree Number	%	Sample With Degree Number	%
<4 term units			forthcoming			
4-7 term units			in part II			
8-11 term units						
12-15 term units						
>15 term units						
Total						

Table 14. Special Program Interventions

California Community Colleges 1994-95*

	AFDC		W/O Degree		With Degree		Total
	Number	%	Number	%	Number	%	
No Matric	38,811	31%	686,625	41%	161,102	64%	886,538
1 Service	10,454	8%	181,602	11%	32,804	13%	224,861
>1 Service	75,091	61%	820,506	48%	57,044	23%	952,641
GAIN	16,150	13%	2,365	0%	180	0%	18,695
EOPS&CARE	8,941	7%	430	0%	16	0%	9,387
EOPS	19,267	15%	49,220	3%	643	0%	69,130
JTPA	2,423	2%	7,048	0%	1,272	1%	10,743
DSP&S	5,220	4%	45,956	3%	5,658	2%	56,834
Total	124,356		1,688,734		252,340		2,065,430

*Derived from MIS sample and Chancellor's Office Student Service Records; unduplicated headcount enrollment, all terms.

PERCENT RECEIVING SERVICE

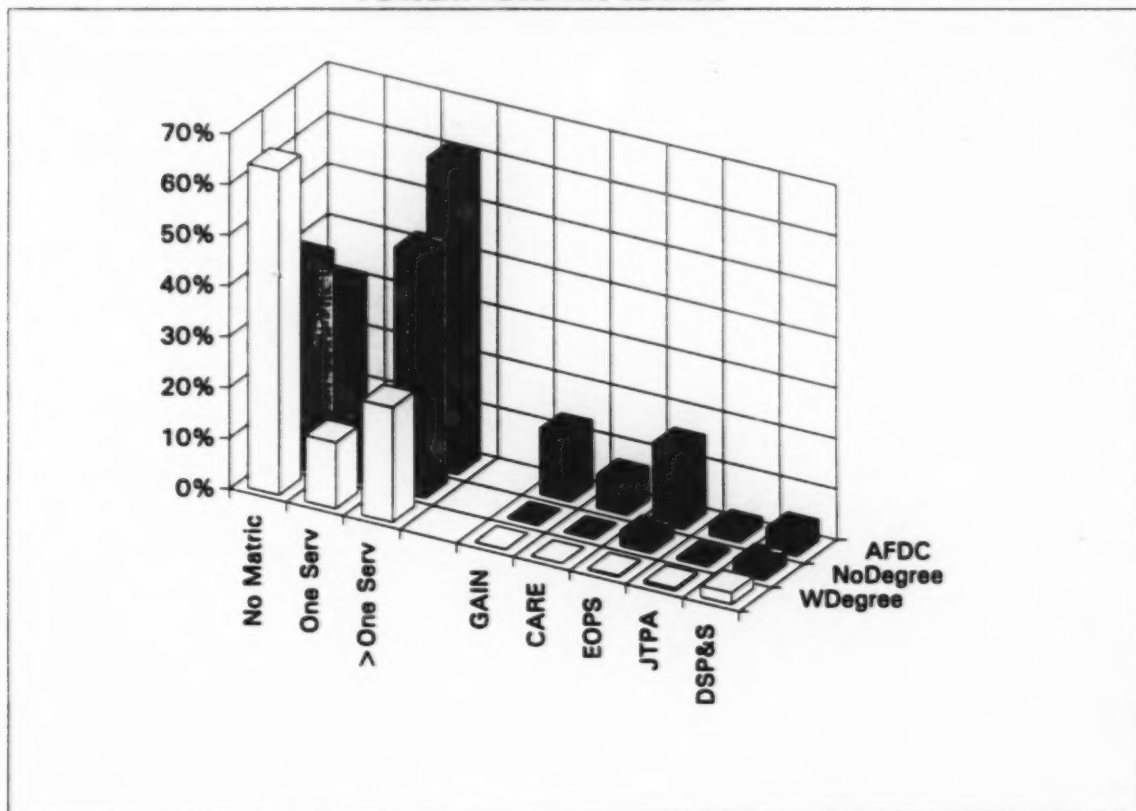


Table 15. Course Completions

California Community Colleges 1994-95

	AFDC	Sample W/O Degree	Sample With Degree
BASIC SKILLS STUDENTS	36,474	16,743	577
1994-95: Enrolled Units	13.01	12.32	10.12
Successful Units	9.96	9.55	8.74
Rate	77%	78%	86%
Cumulative Units Attempted	18.50	20.03	34.48
Units Completed	16.19	18.00	33.19
Rate	88%	90%	96%
OTHER STUDENTS	87,877	116,231	16,683
1994-95: Enrolled Units	7.40	7.18	4.45
Successful Units	5.94	6.04	4.14
Rate	80%	84%	93%
Cumulative Units Attempted	23.02	22.86	30.09
Units Completed	21.03	21.29	29.14
Rate	91%	93%	97%

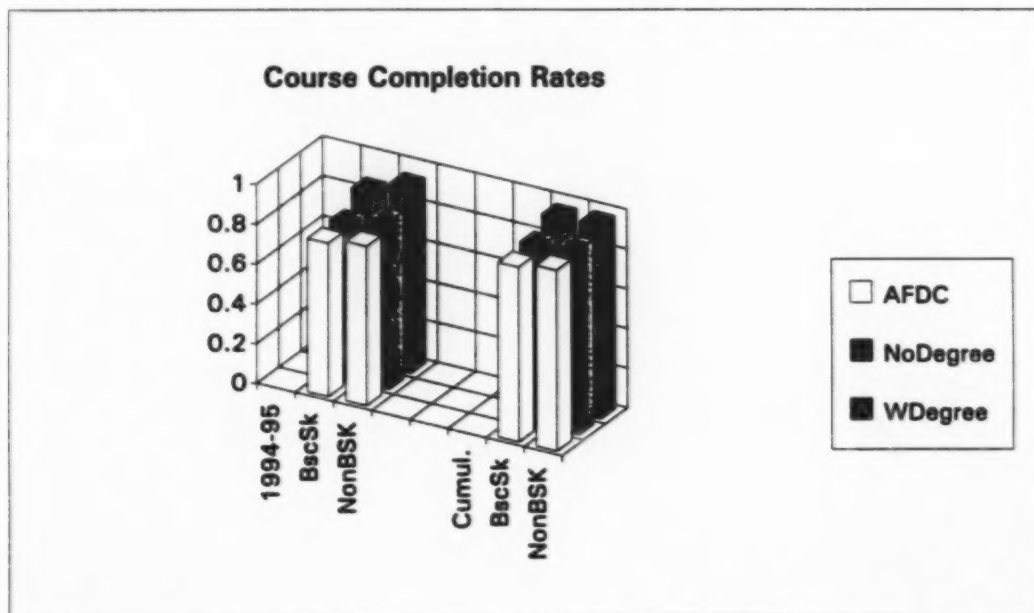


Table 16. Grade Point Averages

California Community Colleges 1994-95

	AFDC		Sample W/O Degree		Sample With Degree
BASIC SKILLS STUDENT	25,249		12,637		450
		z		z	
1994-95: GPA Mean	2.48	-3.92	2.52	-12.85	3.04
Std. Dev.	0.93		0.94		0.84
Cumulative GPA Mean	2.29	-6.71	2.36	-12.49	2.86
Std. Dev.	0.97		0.95		0.83
OTHER STUDENTS	56,119		74,076		17,260
1994-95: GPA Mean	2.69	-35.90	2.88	-77.16	3.41
Std. Dev.	0.95		0.94		0.78
Cumulative GPA Mean	2.47	-41.07	2.69	-67.92	3.17
Std. Dev.	0.97		0.94		0.81

z=test of difference between (large) sample means; at .05, $z > |1.65|$ and at .01, $z > |2.33|$ are significant. But, is difference important?

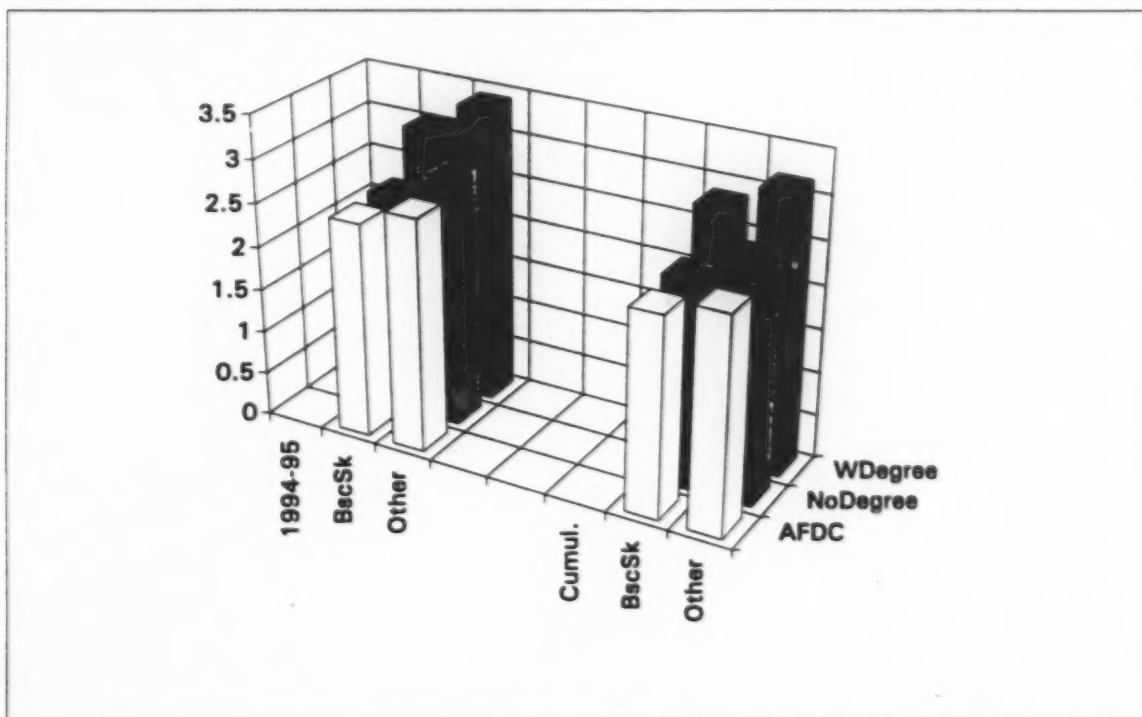


Table 17. Degree and Certificate Attainment, Other Students

**California Community Colleges 1994-95
OTHER (than Basic Skills) STUDENTS**

	AFDC		Sample w/o Degree		Sample With Degree	
Want Degree/Cert.	33,308	38%	39,089	34%	3,352	21%
Don't Want D/C	29,490	34%	43,424	37%	9,407	60%
Undecided	14,289	16%	18,819	16%	1,870	12%
Unknown	10,795	12%	14,910	13%	1,072	7%
Total	87,882	100%	116,242	100%	15,701	100%

Earn Degree/Cert. (1994-95)

Degree & Cert.	382	10%	247	6%	41	9%
Degree	2,091	55%	2,856	71%	228	51%
Certificate	1,317	35%	901	23%	179	40%
Total	3,790	100%	4,004	100%	448	100%

% Earn/Want Degree, Cert.	11.38%	10.24%	13.37%
----------------------------------	---------------	---------------	---------------

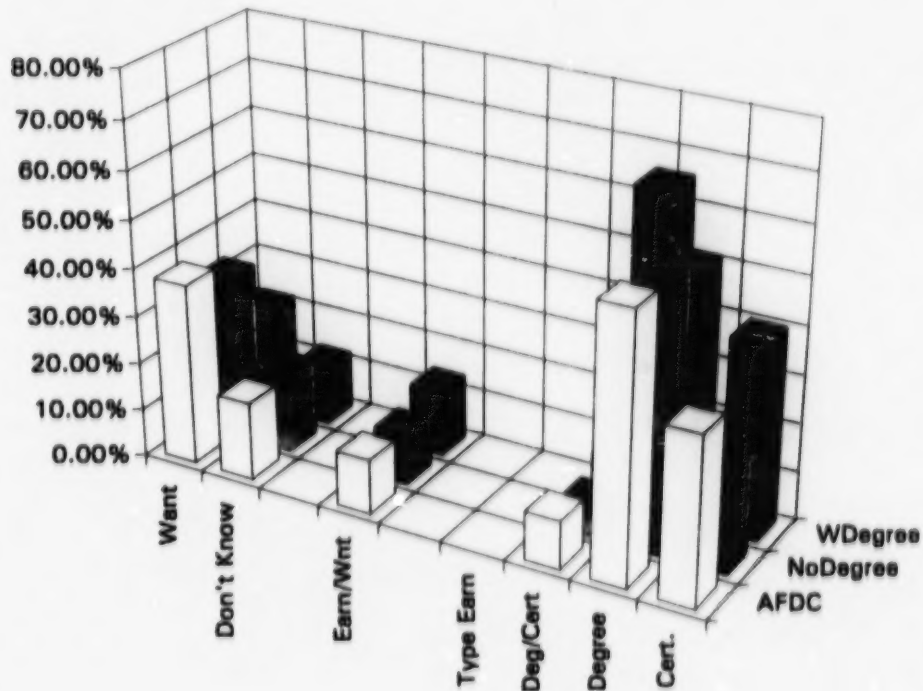


Table 18. Degree and Certificate Attainment, Basic Skills Students

California Community Colleges 1994-95

BASIC SKILLS STUDENTS

	AFDC		Sample w/o Degree		Sample With Degree	
Want Degree/Cert.	15,509	41%	6,865	41%	175	29%
Don't Want D/C	15,216	40%	5,879	35%	323	54%
Undecided	5,520	14%	3,140	19%	83	14%
Unknown	1,919	5%	860	5%	18	3%
Total	38,164	100%	16,744	100%	599	100%
Earn Degree (1994-95)						
AA/AS & Cert.	39	6%	13	5%	1	6%
AA/AS	236	37%	149	57%	8	47%
Cert.	360	57%	98	38%	8	47%
Total	635	100%	260	100%	17	100%
% Earning/Wanting	4.09%		3.79%		9.71%	

